Town of Shrewsbury, Massachusetts Water Department

Rules and Regulations for Water Line Installation

(Revised)

December 11, 2012

Water Connection Permit

1. A water connection permit can be obtained on weekdays at the office of the Water and Sewer Department in the Municipal Office Building between the hours of 8:00 a.m. thru 4:30 p.m. A fee of \$4,000 per single family residential service connection will be charged upon the issuance of the permit. For residential dwelling units, there is an additional connection fee charged for each dwelling unit after the first serviced by any single meter. The following is an illustrative example:

Type of Residential Structure Serviced By A Single Meter					
	Single Family	Two- Family	Three Family	Four Family	For Each Dwelling Unit Per Building Thereafter
Connection Fee	\$4,000	\$6,000	\$8,000	\$10,000	\$2,000

The connection charge for non-residential uses will be based on a fee of \$4,000 plus \$1,000 for every 1,000 gallons per day (GPD) or fraction thereof of projected use above 1,000 GPD. The Superintendent of Water and Sewer will determine the potential daily use of all non-residential connections in order to determine this fee. The following is an illustrative example:

	Non-Residential Connection Fees				
	200 GPD	1,200 GPD	2,200 GPD	3,200 GPD	4,200 GPD
Connection Fee	\$4,000	\$5,000	\$6,000	\$7,000	\$8,000

2. A Water Conservation Fee will be charged on all new residential construction which will be used to fund water conservation activities and programs and for general water improvements. Water Conservation Fees are charged on the following schedule:

Type of Residential Structure Serviced By A Single Meter					
	Single Family	Two- Family	Three Family	Four Family	For Each Dwelling Unit Per Building Thereafter
Conservation Fee	\$1,000	\$1,500	\$1,750	\$2,000	\$250

2. A Water Conservation Fee of **\$1,000** per residential dwelling unit will be charged for all new construction. These funds are to be used to fund water conservation and improvements activities.

A Water Conservation Fee of \$1.00 per gallon of projected use will be charged for all new non-residential construction. The Superintendent of Water and Sewer will determine the potential daily use of all non-residential connections in order to determine this fee.

- 3. A water permit must be taken out before work commences (24 hours in advance).
- 4. Permits will only be issued to water installer licensed to lay water lines in the Town of Shrewsbury. Permits are not transferable between licensed water installers.
- 5. Permits shall be subject to revocation when any of the Rules and Regulations contained herein are not being followed.
- 6. If the work under the permit is not completed within ninety days a new permit must be obtained.
- 7. Permits will not be issued until the applicant has filed a layout plan showing the location of the water line.
- 8. Permits will not be issued until a Dig Safe number has been assigned.
- 9. The connection of automatic in ground lawn and garden irrigation systems to the municipal water supply after February 11, 2003 is prohibited.
- 10. Secondary water meters monitoring outdoor water usage for the purpose of billing adjustments are not allowed in the system.

Licenses

- Licenses to install water services will be only issued to experienced and competent contractors. Licenses must be renewed each calendar year. For an ANNUAL fee of \$50.00. New applicants are required to provide three letters of reference for similar type work along with the required insurance and bond requirements.
- 2. Water installer doing work hereunder shall maintain minimum insurance coverage as follows:

Public Liability \$1,000,000 (1 million)
Property Damage Liability \$1,000,000 (1million)

and shall file a certificate of same with the Water Department for the calendar year of the license.

- 3. The water installer shall post a bond in the amount of \$5,000.00 to assure the satisfactory completion of the most recent work performed by the installer.
- 4. The Water installer shall make repairs without cost to the Town any defects in the work or parts of the work furnished or built by him, any damage due to faulty workmanship on his part or equipment furnished by him which defects or damage may appear within one year from the date of final inspection or one year from time service is in use.

Workmanship

- 1. Each residence or business shall have their own independent water service separate from adjoining properties.
- 2. The homeowner is responsible for pipe and fittings from the street line to the meter. From curb to meter, homeowner responsibility is maintained by a private licensed contractor and a repair permit must be obtained. The Town is responsible and maintains service connections from the water main to the curb stop.
- 3. All takers of Town water must keep their own fixtures and service pipes with the premises in good repair and fully protected from frost. Responsibility for any damage is charged to the property owner.
- 4. The water meters are the property of the Water Department of the Town of Shrewsbury and all damage to the same by frost or other injury while on the premises of a taker shall be charge to the owner of said premises

- 5. No person except an employee of the Water Department, or person authorized by the Department, shall turn on or shut off the water from any hydrant, curb- stop or main gate.
- 6. No licensed water installer is to make repairs on any Town water line or main without a permit.
- 7. In general, water services will not be allowed to have unions or deflectors.
- 8. Water service shall be laid 10ft. horizontally from and shall be at an elevation above the sewer service or septic system.
- 9. Water service must be laid in and covered with 6in. sand below and 6in. sand above and approved by the Water Department.
- 10. Water services must have cover of not less than 5ft. and no more than 6ft.
- 11. Service box and valve box covers must be plumb and set at finished grade.
- 12. Work in Public ways shall be commenced/or completed between April 1 and December 1, unless otherwise approved by the Superintendent of the Water Department.
- 13. Closing of Public Ways shall be subject to the approval of the Superintendent of the Water Department.
- 14. When Public Ways are closed it shall be the responsibility of the permitte to notify the School, Police and Fire departments, with respect to the road conditions each day before 4:30 p.m.
- 15. Foundation of any building or house should be installed before water service is installed. One-inch is the minimum size connection for all residential connections.
- 16. Contractor should also install sleeve through foundation or floor whichever case it may be for water service line. Water line entrance into the foundation shall not be situated as to create unsafe conditions or prevent access to the meter. Service lines shall not be situated directly in front of stairways or in conflict with other utilities.
- 17. Prior to the commencement of work in Public Ways the Permittee shall provide signs 48" x 30" appropriately marked and adequately supported on wooden horses at each end of the street in which the work is being conducted. Signs shall be subject the approval of the Superintendent of the Water Department. Additional signs shall be provided as directed.

- 18. The Permittee shall keep the excavated materials, equipment and supplies from unduly encumbering the roadway; control dust; furnish police flagmen to control traffic; provide for the passage of school buses at all times; not direct water onto the traveled-way; backfill all trenches as closely as possible to the excavating equipment each day and completely backfill the trenches and remove all equipment from the roadway on weekends; cease operations before 5:00 p.m. each day; not to conduct any work on weekends and holidays; provide adequate warning devices such as blinkers, barrels, etc., unless with permission of the Water Department.
- 19. Existing pavement shall be cut utilizing approved pneumatic cutting tools or wheel-type cutters.
- 20. Trenches shall be backfilled from the sand envelope to within fourteen (14) inches of the road surface with selected materials from the excavation. Gravel borrow shall then be placed flush with the existing surface and the entire trench within the right-of-way; and shall then be compacted by mechanical tamping in 12 inch layers or by puddling with jet pipes at least five (5) feet in length. Settled portions shall be filled with additional gravel borrow as required to accommodate the bituminous patch.
- 21. The licensed Water installer shall obtain a street opening permit from the Highway Department at the time of application. The permits for street opening shall establish the paving requirements for both temporary and permanent paving.
- 22. Temporary patch shall be restored with eight (8) hours of notification to do so.
- 23. The licensed Water Installer shall restore the permanent road surface within fourteen (14) days following notification to do so. Failure to comply will result in the Town of Shrewsbury having the work accomplished and the licensed Water Installer shall be liable for all costs incurred.
- 24. When making a water connection in a state highway, the Town of Shrewsbury shall obtain the necessary permits from the Massachusetts Department of Public Works prior to the issuance of a water connection permit. All work shall then be done in accordance with the requirements set forth in the permit issued by Massachusetts Department of Public Works.
- 25. The Superintendent of the Water Department may impose such other conditions upon the Permittee as he deems necessary to provide for the public convenience and secure proper construction procedures and materials.
- 26. Water main must have been tested, chlorinated and approved by the Town of Shrewsbury Engineering Department prior to installing water services.

Procedures for testing and chlorination of water mains are included in the subdivision Rules and Regulations booklet.

Rock Excavation

- 1. Where ledge is encountered in the excavation and must be blasted, a permit must be obtained from the Fire Chief for the use of explosives.
- All blasting shall be done in accordance with the requirements of the Massachusetts Department of Public Safety and such other requirements as imposed by the Fire Chief.
- 3. Blasting operations shall be conducted only by person who have posted a \$20,000.00 bond with the Shrewsbury Town Clerk in accordance with General Laws, Chapter 148, Section 9.

Materials

1. One (1") inch to two (2") inch Plastic Water Service Service tubing. General: All polyethylene tubing shall conform to applicable requirements in the latest revision of the following standard:

ASTM-D 1248 ASTM-D 2239 ASTM-D 2737

Material: The tubing shall be manufactured from ultra-high molecular weight polyethylene (average molecular weight of 1,750,000). Color black.

			Max. Allowable		
Nominal Size	Nominal O.D.	Nominal I.D.	Nominal Wall	Pressure 73.49	
3/4" 1" 1 ¹ /2" 2"	.875 1.125 1.625 2.125	.671 .865 1.253 1.637	.102 .130 .186 .244	160 P.S.I. 160 P.S.I. 160 P.S.I. 160 P.S.I.	

Dimensions shall be such that it can be flared and adapted for use with standard brass water works plant fittings.

Guarantee: Pipe shall be covered by a 50-year guarantee against rot, rust, and electrolytic corrosion, and a 25 year cost of replacement warranty.

2. Specification for PVC (Polyvinyl, Chloride) Class Water Pipe: All 4 inch through 12 inch diameter PVC Class Water Pipe shall be Class 150; or Class 200 for sized 4", 6" and 8". Pipe shall conform with requirements in AWWA Specification C-900-75 or C909, except that is shall also conform to the following specific requirements. Pipe shall be furnished with cast iron outside diameters, and shall have integrally formeds bells of hydrostatic design strength equivalent to pipe barrel. The joint shall use a solid cross-section

electrometric-sealing ring. Pipe shall have Fire Underwriters listing, Factory Mutual listing, and shall be approved for fire line use by Fire Insurance Association. Pipe shall be as manufactured by Johns-Manville or approved equal. Pipe shall be blue or white in color.

Service Boxes

1. Six foot (6') slide type, cast iron with a 2 ½ inch shaft. They shall be Buffalo, New England Pattern or approved equal. Covers shall be set in flush designed to withstand heavy traffic conditions and marked Water. Top section shall be smooth inside. Adjustment Alt. 24" x 60".

Valve Boxes

- 1. Sliding type, adjustable cast-iron shall consist of two pieces, slide type, $5 \frac{1}{2}$ " shaft and round drop cover marked Water size 26" x 48".
- 2. Post fire hydrants shall be break flange, compression-type hydrants meeting all requirements of AWWA Specification C502-43 for fire hydrants for ordinary water service. Hydrants shall have 5 ½" main valve; 2-2 ½" hose nozzles, 1-4½" pumper nozzle; and independent drain and drain rod; national standard threads, open counter clockwise with the pressure; 1-½" operating nut; color to be painted red with silver cap and bonnets and have o-ring packing. Hydrants shall conform in all respects to U.S. Pipe Metropolitan 250 Model-94 or Clow Medallion. Hydrants shall be installed not less than 34 inches from ground and not more than 40 inches high.

Corporation Stops

1. 1" Corporation Stops – Hayes, Ford or McDonald Brass.

Curb Stops

1. 1" curb stops without drain inlet and outlets. Hayes, Ford or McDonald brass.

2.

Angles Stops

1. 1" x 5/8" angle stops with handles. Hayes, Ford or McDonald brass.

Three Part Unions

1. 1" three part unions – Hayes, Ford or McDonal brass.

Metering

1. The Department installs Hersey Water meters from 5/8" to 1" in size at the following costs including parts and labor.

Larger than one-inch in size is supplied by the owners at their expense. The Department needs to be notified after installment to inspect for proper adherence to regulations.

3. Hydrant meters are allowed for construction purposes and other related usages. A 5%" meter setup is billed at \$200.00 non-refundable charge (set-up, use of meter & first 5,000 gallons of water). Additional charge over 5.000 gallons/\$3.00 per thousand gallons. Large hydrant meters require a \$300.00 deposit of which \$100.00 is non-refundable and a charge of \$3.00/thousand over 5,000 gallons. Additional charges may apply if damage or theft occurs to the meters.

Inspections

- 1. Request for inspections on water line installation must be made before 4:00 p.m. on the day preceding the installation. Also curb or curb box should be exposed so measurement can be taken.
- 2. Inspection will generally be made only during normal working hours of the Water Department.
- 3. No backfilling is to commence until the water line has been inspected.
- 4. The water installer will be charged all cost for inspections made outside the normal working hours. Charges will reflect the Water Department personnel's prevailing wage rates.

Penalties

1. Any person violating any provisions of these Rules and Regulations shall become liable to the Town of Shrewsbury for any expense, loss or damage incurred by the Town of Shrewsbury by reason of such violation.

Town of Shrewsbury Water Department